

Amendments to the Claims

Claims

1. (Currently amended) A fire detector, comprising an insertable detector assembly which includes a sensor arrangement and an electronic evaluation system, and a housing which surrounds the sensor arrangement and has openings to provide access by air and, when applicable, smoke to the sensor arrangement, wherein the detector is of modular construction and is configured to accommodate detector modules having sensors for different fire parameters, all detection modules being compatible with a single housing, wherein the sensor arrangement and the access openings are arranged substantially in one plane, and wherein the detection modules have an identical carrier plate for all detector types, the carrier plate insertable in the detector and configured to accommodate the sensors for the different fire parameters.
2. (Cancelled)
3. (Cancelled)
4. (Currently amended) The fire detector of claim 3 1, wherein the carrier plate includes, on its underside facing towards a detector cap, housings for accommodating components of an electro-optical sensor system and is configured on its upper side for mounting a printed circuit board carrying the electronic evaluation system.
5. (Previously presented) The fire detector of claim 4, wherein the housing includes a detector hood comprising an annular upper part and a lower part spaced therefrom and forming the cap of the detector.
6. (Previously presented) The fire detector of claim 5, wherein a gap between the two parts of the detector hood forms the access openings and the lower part is connected to the

upper part by bridges.

7. (Previously presented) The fire detector of claim 4, and further comprising an optical detection module for measuring scattered light caused by smoke including at least one light source, a light detector, a measuring chamber and a labyrinth system having screens arranged at its periphery, the at least one light source and the light detector being fixed in the housings on the underside of the carrier plate and the labyrinth system being formed in the manner of a cover and being fixable to the carrier plate.

8. (Previously presented) The fire detector of claim 6, further comprising a thermal detection module having two temperature sensors which are fixed to the printed circuit board radially opposite one another and project downwardly from the latter through the carrier plate.

9. (Previously presented) The fire detector of claim 8, wherein the bridges are configured in the form of wings or straps having a vertically disposed opening and are provided in an even number, and in that the temperature sensors project from above towards one of the bridges in each case in such a way that their free ends are located directly in or behind the opening.

10. (Previously presented) The fire detector of claim 9, wherein the thermal detection module has a cover plate fixable to the carrier plate for covering the housings which are provided for the electro-optical sensor system, and in that openings through which the temperature sensors can pass are provided in the cover plate and a dividing wall for effecting a directed air-flow is provided between the temperature sensors and is disposed in a radial direction.

11. (Previously presented) The fire detector of claim 6, further comprising an optical-thermal detection module for measuring scattered light caused by smoke and for measuring temperature, which detection module includes the electro-optical sensor system and two temperature sensors, the latter being arranged laterally beside the optical sensor system.

12. (Previously presented) The fire detector of claim 1, wherein the temperature sensors are fixed to the printed circuit board radially opposite one another and their free ends are located in the vicinity of the bridges.

13. (Previously presented) The fire detector of claim 12, wherein the bridges are so configured that they protect the temperature sensors from mechanical influences and ensure air-flow to the temperature sensors which is substantially as undisturbed.

14. (Previously presented) The fire detector of claim 7, further comprising a light guide is fixed to the base of the labyrinth system, which light guide extends upwardly to the printed circuit board and forms part of an alarm display visible in the region of the apex of the detector.

15. (Previously presented) The fire detector of claim 14, further comprising a base associated with the housing of the fire detector and having a multi-pole connector, and by a multiple plug arranged in the housing of the fire detector and insertable tangentially in the multi-pole connector by rotating the housing of the detector relatively to the base.

16. (Previously presented) The fire detector of claim 15, wherein the multiple plug is integrated in the carrier plate using insert technology.

17. (Previously presented) The fire detector of claim 16, further comprising an alarm module having an acoustic alarm emitter arranged in a separate housing offset from the housing of the fire detector.

18. (Previously presented) The fire detector of claim 9, wherein the bridges are so configured that they protect the temperature sensors from mechanical influences and ensure air-flow to the temperature sensors which is substantially undisturbed.

19. (Previously presented) The fire detector of claim 1, further comprising an alarm module having an acoustic alarm emitter arranged in a separate housing offset from the housing of the fire detector.

20. (Previously presented) The fire detector of claim 6, further comprising an alarm module having an acoustic alarm emitter arranged in a separate housing offset from the housing of the fire detector.

21. (New) A fire detector comprising:

- a detector module which includes a sensor arrangement and an electronic evaluation system;

- a housing surrounding the sensor arrangement and having openings to provide access by air and, when applicable, smoke to the sensor arrangement;

- wherein the fire detector is of modular construction and the detector module is one of a plurality of different types of detector modules, each of the different types of detector modules having a different set of components including a different sensor for a different fire parameter, and each of the different types of detector modules compatible within the housing, wherein each of the different types of detector modules comprise an identical carrier plate which is insertable in the fire detector.

22. (New) The fire detector arrangement of claim 21 wherein one of the plurality of different types of modules comprises at least one light source and at least one light detector and another of the plurality of different types of modules does not comprise the at least one light source and the at least one light detector.